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THE "ABDOMINAL METHOD"

OF

SINGING AND BREATHING

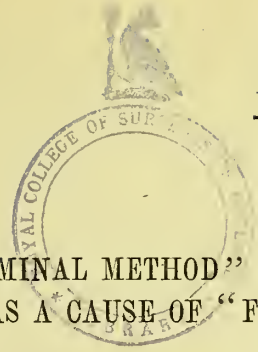
AS A CAUSE OF

"FEMALE WEAKNESSES."

CLIFTON E. WING, M.D., Boston.



WITH THE WRITER'S COMPLIMENTS.



THE

"ABDOMINAL METHOD" OF SINGING AND BREATHING AS A CAUSE OF "FEMALE WEAKNESSES."*

By Clifton E. Wing, M.D., Boston.

The following cases, all happening under observation within a comparatively short time, have seemed to me sufficiently interesting to warrant their publication. The calling of attention to a possible danger that, as a rule, is not suspected or dreamed of by singers or their instructors, may lead to the use of the ounce of prevention which in the case of uterine troubles is often worth much more than the pound of cure. At the present time so many of our young women are practising, and so many instructors are teaching, singing (and, in courses in elocution, breathing) by what is termed the "abdominal method" that the matter is not without importance.

Case I. The first patient was a young unmarried lady, a resident of this city, who had previously enjoyed excellent health. Eleven months before she consulted me she began to suffer with pain in her back and sides, "bearing down," and, with these local symptoms, great depression of spirits. At about the same time her menses, which previously had come regularly each four and a half weeks, became more frequent and profuse. She found that occasionally after walking her symptoms were aggravated. For three months she had been troubled with frequent desire to pass water. She suffered with constipation, and movements of the bowels were at times painful.

The lady had come to consult me because, as she said, she felt sure, from having heard from other sufferers with uterine troubles their symptoms, that she had the same trouble herself. Upon my asking what she thought could have induced such a difficulty, she at once replied that she felt certain that she had injured herself by singing by the "abdominal method," which she had taken much interest in and had practised a good deal; that from the first it had made her feel badly, when she had previously been well; that, find-

* A paper read before the Boston Society for Medical Improvement, at its meeting, November 22, 1880, and communicated to the Boston Medical and Surgical Journal.

ing she always was worse after singing, she gave it up for a while, when her symptoms at once improved and menstruation became less frequent; that getting better, and thinking that, perhaps, after all, her singing exercises had had little to do with her past symptoms, she again resumed them, when her troubles returned, and she finally became worse than ever. She ended by asking me if I did not think she was right. Knowing nothing about singing, and not really understanding what she meant by the "abdominal method," I did not express a decided opinion. In fact, I gave little attention to her idea. Proceeding to make my examination, I found a well-marked displacement of the womb, that organ being thrown completely backward.

There is nothing particularly instructive in the further history of the case. A prolapsed ovary gave considerable trouble in the fitting of a comfortable supporter, but there were no adhesions; the parts were finally replaced, and the uncomfortable feelings in the back of the neck and the top of the head, and, as the patient expressed it, "the total inability to think properly," which were at times marked, as often (although not always) is the case with uterine ailments, were greatly relieved. For a time the patient could scarcely believe that the improvement in her mental feelings was all due to improvement in the local condition; but when, not long ago, she dispensed with her supporter for a while, with the result that the womb again fell backwards, with a return of all the head symptoms, which again disappeared with the readjustment of the pessary, she became convinced.

Case II. The lady was thirty years old, and had been married seven years. Never pregnant. Menstruation, which was established at the age of thirteen, before marriage had always been painful. Since her marriage she had been free from pain at those periods. She consulted me the first time for leucorrhœa and local irritation, which I judged from her story to be due to a simple inflammation of the vagina. She at this time had no marked uterine symptoms, and I did not deem an examination necessary, but prescribed some simple injections, telling her if she did not get better in a short time I would then investigate the case more thoroughly. In a few days she reported herself as so much relieved that she thought further treatment unnecessary. I did not see her again, professionally, for about five months, when I was called to the house, and found her in bed, suffering with acute pain in the small of her back and across her hips, and unable to stand, walk, or even move in her bed without increasing her sufferings. Making a uterine examination, I found the womb turned backward toward the hollow of the sacrum, pressed low down in the pelvis, acutely congested, and very tender. There was no inflammation in the neighborhood.

Here, again, I was asked if "abdominal singing" could have produced the displacement, and, on inquiring into the matter, learned the following story: The lady had been taking instruction in singing for some months. Hearing of another teacher who was said to be remarkably good, and to have a "new method," she had gone to her, taking her first lesson on the previous Friday (I was called to see her on a Monday morning). She had gone to the teacher, according to directions, wearing no corsets, that she might be free to go through the necessary movements and manipulations. After the lesson she went home, feeling "dreadfully" in the pelvic region, but never for a moment supposing that she could in this way do herself serious harm, she repeated the exercises on the next day, after which she felt still worse, and taking a horse-car home was scarcely able to get from the car to the house, on account of the pain in her back and sides, "bearing down," and "feelings as though she was coming to pieces." Symptoms such as these she had never before experienced. She immediately took to her bed, where she remained up to the time that I saw her.

The parts were replaced and a supporter was fitted. The patient wore it for a few months, after which it was dispensed with. I recently met her, and she told me she remained perfectly well. It was lucky for her that her symptoms were so acute at the outset, for had the case not received the early attention which it did she would not have been able to do without the supporter so soon. It is unnecessary to add that she has not resumed the singing exercises.

Case III. Miss B., aged twenty, single. Menstruation began at fifteen, and always is pretty regular. Time of flow, four days. Amount normal. Has always had some pain the first day when unwell, but lately the pain has been getting worse, and has lasted longer. For some months she has noticed that she has not been able to walk, as she formerly could, without getting tired out. Lately she has had pain across the abdomen and low down in each side, and has been unable to sit any length of time without a severe pain in the back, which latter pain makes it difficult for her to rise after having been seated, and is always worse when she is unwell or after she has walked any distance. Suffers with constipation. Micturition not especially troublesome. Is "depressed in spirits."

Six months before seen she began a course of instruction in singing by the "abdominal method." At this time, as she states, she was in excellent health. At about the time she began the method she was warned by the lady whose case is the first one I report, with whom she was acquainted, to be careful and not injure herself, as *she* had done, and this friend even went so far as to see her teacher and ask her to take especial care to prevent such a result. The latter, although she did not believe such harm could result from these

singing exercises, undoubtedly was as careful as she could be. Under the course of instruction the voice was thought to be decidedly improved, and it became much more powerful. (A like result was noticed in the case of the first patient.) Her progress, so far as the singing was concerned, was eminently satisfactory, and she was told that she had "got the method right;" but soon after she entered upon the course her local symptoms began to appear, and they grew gradually worse, until she was so poorly that she deemed it best to take medical advice. On uterine examination I again found a complete displacement of the womb backward.

I asked the patient, who was quite positive as to what had brought on her trouble, if she could not think of some cause other than her singing. She replied that she could think of nothing else. She had noticed that she always felt worse after singing, and lately it had really hurt her each time.

I fitted a proper supporter, which the patient is still wearing. She is now feeling quite nicely. Recently, as an experiment, she sang a little, when her old symptoms again began to show themselves.

Case IV. The fourth case is of value here as evidence in the same direction. The patient was seen by me in consultation with a physician of this city, who had recently been called in, and who requested me to assume the case. The lady was twenty-three, married, and the mother of two children, the youngest eighteen months old. She was having backache, "bearing down on walking," "pain in the womb," etc. etc., which were easily accounted for by the large, congested, tender, "sagging uterus" found on examination. Under appropriate treatment she was getting along nicely, and had become quite free from pains and aches, when one day, at my office, she said she wanted to ask me a question, which was this: "Doctor, can I do myself harm by singing? Is it possible for any one to cause uterine trouble in that way?" Rather surprised, I asked her if she had heard so. She replied that she had never heard the subject mentioned, but was disposed to think so because, having recently sung, a thing she had not attempted before for a considerable time, she had noticed that "bad bearing down" followed. Asking what method she used in singing, the reply was, "The abdominal method."

I would call attention to the fact that each of these patients, of her own accord and without my having suggested the idea, advanced the opinion that the singing had caused the troubles. Indeed, until the cases repeated themselves, knowing nothing of the method in question, I was not disposed to adopt their opinion.

Becoming interested in the matter, I applied to Dr. S. W. Langmaid, of this city, thinking he would be able to give me the information I desired, and he has kindly permitted me to publish the following contents of his letter in reply:—

"I have no doubt that injuries such as you describe have been produced by attempts at 'abdominal' (diaphragmatic) respiration.

"I have known the digestive functions disturbed, pain and soreness in various parts of the abdomen produced, and, in one case, the occurrence of prolapsus uteri brought about during the act of attempting to use the abdominal method of breathing in singing.

"The injuries result not from properly conducted abdominal respiration, but from a wrong method of using it and a misconception of its legitimate use and limit. Such misconception is common enough among singing teachers and their pupils.

"Abdominal respiration gives the singer the greatest control of the column of air to be used in vocalization. If, however, the proper action of the muscles (relaxation) during inspiration does not precede the expiratory effort (contraction), the contraction is not only productive of imperfect sounding processes, but may be the cause of injury to organs which are so situated as to be influenced by the pressure exerted by the contraction.

"The tendency of the abdominal walls to return to a normal position, out of which they have been carried during inspiration, is sufficient to regulate the flow of air during ordinary singing. A forced contraction results in an increased blast of air, which is needed to give greater intensity to tone.

"The common fault consists in the attempt to contract from an already retracted abdominal wall, the inspiration having been limited to a superficial thoracic ('clavicular') respiration. If, now, there is added the restrictive action of a close and unyielding corset, any of the movable organs in the abdomen or pelvis must yield to the *vis a tergo* of the abdominal contraction. *A priori* with regard to the effect upon the uterus, retroflexion or retroversion would be the common forms of displacement, unless a tendency to prolapsus existed."

Lately I have talked with a number of ladies, and have been surprised to find how many of those acquainted with the subject, on my mentioning the matter to them, have at once said that they had no doubt whatever that the method was often injurious. Several had attempted it themselves, and finding that they did not feel so well after it had given it up. Others knew of its bad effect upon friends. From one lady I got the following story: Five women were taking instruction from one teacher at the same time. One, previously well, gave out entirely, and was afterward treated for uterine displacement. A second, after four weeks of practice, began to have leucorrhœa and pain upon walking, symptoms she had never before had. In two others dysmenorrhœa made its appearance, when formerly menstruation had been painless. The fifth one—the only one of the five who went through the process without developing more or less of what are in general terms called "uterine symptoms"—became a good singer, and is now teaching the method to others.

The opinion seems to be general that this method "brings out the voice" in a marked degree. Several have asked why some (and a number of the most celebrated professional lyric artists of the day have been named to me as singing in this way) can practise the method, while others cannot without injury to themselves. The law of "the survival of the fittest" may be a partial explanation. Possibly they have acquired the "right method" and have avoided the "wrong methods," although what constitutes the "right method" seems to be a matter of dispute among teachers, each thinking his (or her) method the one, and I must leave the decision of this point to those who are competent to settle it.* Probably some who have been injured in this way, go on singing in total ignorance of the cause of their suffering. Perhaps in certain instances the reputation and the income derived from the possession of a wonderful voice by the professional singer may be sufficient to induce the latter to bear with physical aches and pains. This last idea has been suggested by the fact that I have been recently informed that a teacher of this city, when told by a pupil that since beginning the method she was unable to walk as formerly, replied, "A singer must expect to be unable to walk if she is to sing well," and I have heard of a somewhat similar remark made by a noted prima donna.

It may be well to call attention here to the tissues which normally sustain the uterus, and to the forces which, on the other hand, tend to press it down out of its proper position. In general terms, *the tissues which hold the womb in position are elastic*, and although their strength is undoubtedly somewhat affected by the general health, as that of all ligaments and tissues must be, *they are not like the common muscles, contractile and capable of being greatly strengthened by exercise.* Ignorance of this fact is very common among the laity, and often leads to futile attempts at remedying uterine displacements by general gymnastic exercises, which often, perhaps as a rule, *increase the downward pressure*, and thus not infrequently make a bad matter worse. Indeed, general muscular strength and development is by no means a sure protection from "uterine weakness," as every physician knows.

Barnes, in his well-known and excellent text-book on the Diseases of Women, writes, "The downward force is always acting. It is exerted at every expiratory effort, and is exaggerated by coughing, . . . by every exertion, in short which fixes the chest. . . . Then the force of gravity is added, and is always at work when the body is in the upright posture." He points out how naturally it follows that when the sustaining tissues are, from any cause, weakened, displacements ensues, and then, discussing the opposite side of the matter,

* It is a noticeable fact that the *pupils* invariably consider their own instructor the best of all, and always feel certain that the method they are acquiring is the only correct one. This however is but natural, for did they think otherwise they would take other instruction.

says that even in virgins "*force alone exerted upon healthy structures is enough to cause prolapse.* The force obviously comes from above. It is produced by the pressure of the intestines, bladder, and broad ligaments propagated from the *diaphragm* and *abdominal walls.*" He cites cases of displacement brought on by coughing. The married and those who have borne children are of course more liable to such displacements than virgins. Again Dr. Barnes writes (page 553), "In the great majority of cases prolapsus is accomplished by small forces acting continuously or with brief intermissions over a long period of time." The conditions which, according to this able writer and noted practitioner, produce the majority of cases of prolapsus, would seem to be exceedingly well fulfilled by the abuse of the "abdominal method." What he says of prolapsus applies equally well to all displacements downward.*

That serious uterine troubles should be caused in this way will not therefore surprise physicians once informed of this method and the manner in which it is practised at the present time. I am assured by good authority that one Boston teacher boasts that by "*proper practice*" such power may be acquired that if the person be placed back against the wall, and a full sized piano be moved up against the retracted abdomen, the latter, by the "abdominal method," can be so forcibly expanded that the piano will be pushed rapidly away. A medical education is hardly necessary to enable a person to understand that by such procedures injurious pressure must come upon the internal organs, especially in the female. In the cases I have reported, however, no such extreme measures were practised. The teachers seem to have been quite careful with their pupils, so far as they knew how to be so.

As a specialist, practising exclusively the treatment of uterine affections, doubtless more of these bad results have come to my notice than would have been the case in the same short time, had I been in general practice, but from the number I have heard of since my attention was directed to the subject, I am disposed to think that upon investigation such cases will be found common enough to render the subject worthy the attention of the family physician. I strongly suspect that we have in the abdominal method, as now practised, a fruitful source of those common troubles, uterine displacements.

[NOTE.—Since the foregoing was written another instance, which is worth reporting, has come under my observation. In the course of my inquiries I was told by a patient that one of her lady friends—

* The gradual and insidious way in which serious uterine displacements may sometimes be produced by this practice is well shown in Case III. The teacher, having been forewarned, took especial pains to frequently ask her pupil when she was practising in her presence, if while singing she felt dragging sensations or local pains of any kind, but up to a few weeks before she came to me, although her health was gradually giving out, the patient had not felt her singing hurt her.

with whom it so happened I was acquainted—knew all about the subject, having taken instruction in elocution (which, by the way, appears to have been "quite the rage" of late), in the course of which she was taught "*the proper method of abdominal respiration*," and she agreed to tell her that I wanted information about it. A few days later I met the lady on the street. She told me that my patient had spoken to her, and she kindly volunteered to call at my office at some future time and talk with me upon the subject, expressing herself as quite sure that my patients had not acquired the "right method," and that all their troubles were due to this fact. I saw nothing more of the lady until a few days ago, when, going to my office in the morning, I found her awaiting me. Supposing, of course, that she had come to give me the desired information, I was very much surprised to hear that she wished to consult me professionally. She was a lady of unexceptional muscular strength, of which she was rather proud; was fond of gymnastic exercises, and had taken much interest in "abdominal breathing." This latter she had lately practised quite assiduously in connection with her elocution. She had the mistaken notion—previously referred to—that it would tend to strengthen the "muscles which support the womb," and thus be rather a safeguard against future uterine trouble. The week previous she had practised the method a certain length of time on four successive days, feeling on each occasion a "pulling in the back." The fifth day she became used up, and could not go through the exercise. Since that she had become sleepless and very nervous, and remembering her conversation with me on the subject concluded to consult me at once. *I found a marked prolapse of the womb, the cervix being very near the vulva.*

As the result of her experience the lady has changed her opinion, and intends to give up elocution and the "abdominal method."]

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